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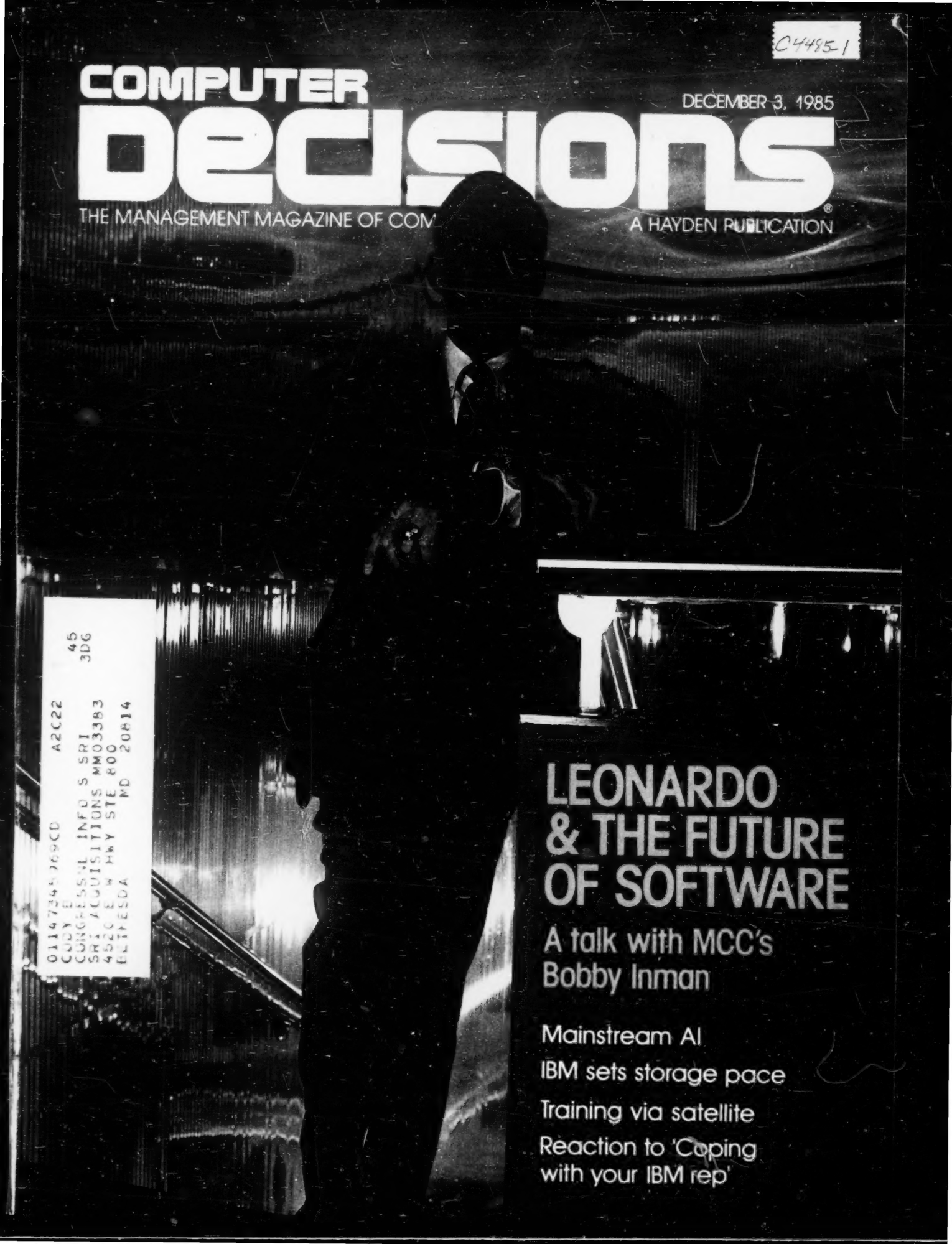

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LEONARDO & THE FUTURE OF SOFTWARE

A talk with MCC's Bobby Inman

Mainstream AI

IBM sets storage pace

Training via satellite

Reaction to 'Coping with your IBM rep'

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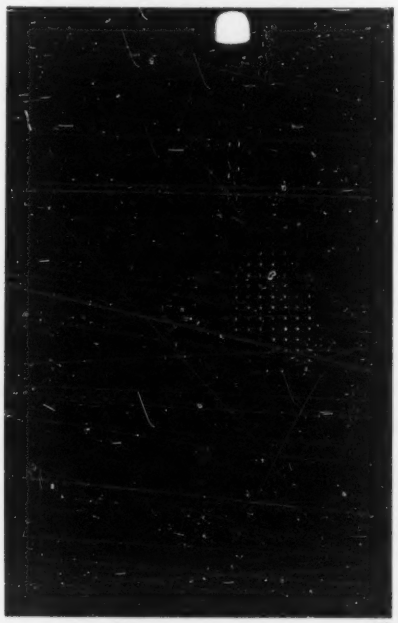

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COVER PHOTO: Zigy Kaluzny

COVER STORY

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With its Leonardo project, MCC is shaping large-system software's future, says Bobby R. Inman, chairman.

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100

by a plug-compatible vendor. Up to now, only IBM's 3084s and the announced-but-not-delivered 3090/400 featured four coupled cpus in a single processor complex.

Amdahl also announced enhancements to current 580 processors, including enlarged main memory capacity and improvements in channel configurations. Maximum memory on the 5840, 5850, 5860, 5867, and 5870 processors has been increased from 64 Mbytes to 128 Mbytes. New options for the 5868 and 5880 processors include a 40-channel configuration, an alternative to the 32- and 48-channel configurations already available. In addition, users with two 5850 processors can now couple them to form one 5868 processor.

—Michael Dobberstein

DEMAND GROWS FOR SYSTEMS ANALYSTS

The demand for programmers is levelling off, but the need for systems analysts is burgeoning, according to third-quarter statistics from the U.S. Bureau of Labor Statistics in Washington.

According to the bureau's estimates, 553,000 programmers are employed in the United States, only 1 percent more than in the third quarter of 1984 and 14 percent more than in 1983. In contrast, the bureau estimates that 394,000 workers are employed as systems analysts, up 39 percent over 1984 and 22 percent over 1983.

Experts say organizations are emphasizing system design and application rather than straight coding skills. "The coding, debugging, and testing skills of a programmer are pretty much obsolete right now," says Elias Awad. Awad is chairman of the special interest group on computer personnel research for the Association for Computing Machinery, New York, and a teacher at the McIntire School of Commerce at the University of Virginia, Charlottesville.

Nonprocedural fourth-generation languages have both increased the productivity of programmers and extended programming capabilities to end users. The result is "a steady de-emphasis on coding," Awad says. "Organizations' commitments to Cobol explain why there's still a demand for programmers, but programmers are needed only for documentation and maintenance of existing systems," he says.

Rather than spend money on new programs, corporations are trying to optimize the use of their existing systems, says Leslie Epstein of The Omni Group Ltd., an office automation consultancy in New York. "Organizations are stopping to look at their systems and exploit what they have," she says. "They're planning a little more, and not programming on request." Organizations need analysts because they "can work through the life cycle of a project, from its definition to end-user training," Awad says.

Also, analysts are better able than programmers to find and develop applications for an organization's existing systems, says Tom Davenport, director of the Prism research service for Index Systems Inc., a dp and management consultancy in Cambridge, MA. Analysts can decide what can be done with a system, and how, but programmers only execute their assignments, Davenport says. "Analysts can see how the data flow in and out of an organization's departments, and design a system to deliver exactly that," says Awad.

Computer systems analysts and programmers are the only two types of data-processing professionals the Bureau of Labor Statistics tracks by title. The bureau's numbers represent the average number of professionals employed during the preceding 12 months.

A word of caution about the bureau's numbers: They are extrapolated from a sample of only 60,000 households. A bureau spokesman admits the figures "jump around a bit" (see chart) because of the relatively small size of the sample. But, he says, general trends can be spotted over a period of years. □

(News continued on page 28)

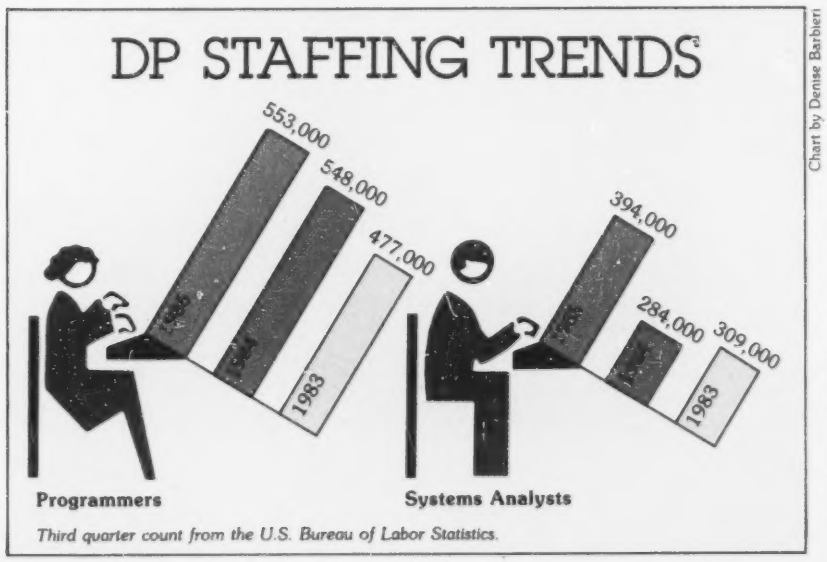

Chart by Denise Barbieri

Third quarter count from the U.S. Bureau of Labor Statistics.